



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/511,247

10/13/2004

Laimute R Svarcas

3166-01

8880

26645

7590

11/25/2008

THE LUBRIZOL CORPORATION
ATTN: DOCKET CLERK, PATENT DEPT.
29400 LAKELAND BLVD.
WICKLIFFE, OH 44092

EXAMINER

VASISTH, VISHAL V

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

11/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,247	Applicant(s) SVARCAS ET AL.	
	Examiner VISHAL VASISTH	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment of 7/22/2008 overcame the rejection under 35 USC 102 set forth in the office action mailed 1/24/2008. Claim 6 was cancelled by amendment. New 35 USC 103 grounds of rejection necessitated by the amendment are set forth below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe, US Patent No. 5,264,005 (hereinafter referred to as Blythe) in view of Chamberlin, III, US Patent No. 6,242,394 (hereinafter referred to as Chamberlin).

Blythe discloses a two-cycle lubricant and method of using the same comprising the following components, a major amount of a fuel lubricant mixture (see Abstract)

Art Unit: 1797

from 15 to 70 wt% of a fluidizing oil such as natural or synthetic oils (component (a) of claim 1) (Col. 27/L. 63-64 and claim 54 of Blythe), the reaction product of isostearic acid and tetraethylenepentamine (component (b-1) of claim 1 and as recited in claims 4-5) (Col. 22/L. 49-58), a Mannich dispersant which is the reaction product of polybutene-substituted phenol, formaldehyde and an aqueous dimethylamine solution (component (b-2) of claim 1) (Col. 20-21/L. 29-6) and a Stoddard solvent having a kinematic viscosity of .74-1.65 (cSt) at 100°C (component (c) of claim 1) (Col. 30/L. 20-23).

The lubricant composition of Blythe discloses comprising from about 2 to about 15% by weight of the product of a isostearic acid and tetraethylenepentamine (which overlaps with about 0.5 to about 8 wt% as recited in component (b-1) of claim 1) (Col. 22/L. 36-46 and Col. 28/L. 46-49) and from about 0.5 to about 30% by weight of a Mannich dispersant (which overlaps with about 0.5 to about 8 wt% as recited in component (b-2) of claim 1) which makes the total weight percentage of the two components between 2.5 wt% to 45 wt% which overlaps with the claimed range of at least 1.5 wt% of dispersants even if there are no other dispersants present in the composition (Col. 16/L. 5 and Col. 28/L. 39-45 and Col. 30-31/L. 56-10). The composition of Blythe further provides that the total nitrogen content of the lubricant composition is 0.5 wt% (which is within the range 0.25 to 0.75 wt% of nitrogen as recited in claim 1) (Col. 21/L. 6).

Blythe discloses a lubricant composition and fuel-lubricant mixture (Col. 28/L. 16-18) wherein the lubricant composition are used in fuels in amounts to release stuck piston rings or increase compression. The lubricant composition is preferably used at a

Art Unit: 1797

concentration of 4 ounces per gallon of fuel. Based on a conversion of 128 ounces is equal to 1 gallon the ratio of fuel to lubricant would be within the claimed range 10-250:1, therefore the composition of Blythe comprises a major amount of a liquid fuel composition (as recited in claim 7) (Col. 28/L. 26-38).

The finished lubricant composition of Blythe further includes the use of additives such as dispersants other than the components (b-1) and (b-2) as discussed above which include aminophenols (Col. 3-4/L. 19-56) present from about 5 to about 30% (about 0.5 to about 8 percent by weight of at least one additional dispersant not claimed in claim 1 as recited in claims 2-3) and antioxidants (Col. 30/L. 46-47). Blythe, however, does not explicitly disclose the amount of antioxidant present in the composition or lubricating a direct fuel injection two-cycle engine.

Chamberlin discloses a lubricant composition suitable for fuel injected two-stroke cycle engines and method of using the composition to lubricate a direct fuel injected crankcase two-stroke cycle engine (as recited in claims 8-9) (Claim 20 of Chamberlin) comprising, an aminophenol, a Mannich dispersant, and further additives to formulate a finished composition (see Abstract). The additives include pour point depressants, foam inhibitors and hindered phenolic antioxidants wherein the antioxidants are present in an amount of 0.50 parts by weight and can be as low as 0.05 wt% and as high as 5.0 wt% (which overlaps with the range about 0.5 to about 2.0 wt% of an antioxidant as recited in component (d) of claim 1) (Col. 28/L. 14-16 and Col. 29/L. 11-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the amount of antioxidant in Chamberlin in the composition of Blythe in order to reduce

the oxidation of the oils in the composition and a direct fuel injection allows for less accumulation of unused oil in the crankcase which is recirculated throughout the engine (Col. 24-25/L. 33 of Chamberlin).

Response to Arguments

5. Applicant's arguments filed 5/12/08 have been fully considered but they are not persuasive. Applicants argue that the present invention provides unexpected results and provide data and a declaration by Dr. Brent Dohner filed on 7/22/2008 that allegedly supports the applicant's position. However, the data submitted is not commensurate with the scope of the claims. For example, claim 1 gives a range of at least 1.5 wt% of all dispersants in the composition including (b-1) and (b-2). In the data submitted by applicant however, the combined amount of components (b-1) and (b-2) is within a much narrower range wherein the amount of dispersants is present in an amount of at least 10 wt%, and therefore does not demonstrate unexpected results across the full scope of the claim. Also, the data compares compositions containing nearly the same amount of the (b-1) component, the same amount of antioxidant but the comparative example uses a succinimide dispersant and the inventive example uses a significant amount of the (b-2) component. However, the claims mention the use of other dispersants and do not limit these dispersants in any way. Also, component (b-1) can be many different compounds, but the submitted data only shows one type of reaction product, therefore unexpected results have not been shown across the scope of what is claimed.

Conclusion

Art Unit: 1797

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-R 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VVV

/Glenn A Caldarola/
Acting SPE of Art Unit 1797